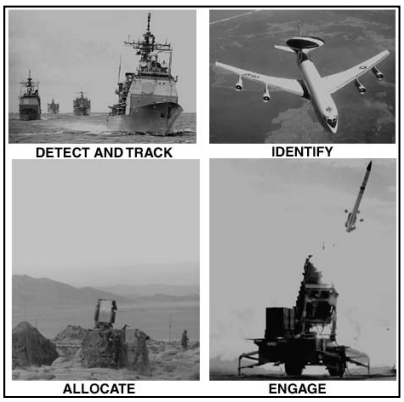
JOINT CRUISE MISSILE DEFENSE (JCMD)



OSD chartered the Joint Cruise Missile Defense (JCMD) JT&E to employ multi-service and other DoD agency support, personnel, and equipment to investigate, evaluate, and improve the operational effectiveness of joint defenses against cruise missiles (CM). The JT&E will identify a baseline capability by evaluating and documenting current JCMD processes and procedures in realistic operational scenarios. The JT&E will identify and select potential enhancements to the JCMD process and will test those enhancements in environments as closely aligned with baseline measurements as feasible. The Full-Dimensional Protection pillar of Joint Vision 2010 addresses the need to protect US forces from the very technologies that the U.S. is attempting to exploit. The JCMD JT&E will address the number-one priority of the Full-Dimensional Protection pillar: countering air and missile threats.

The Joint Cruise Missile Defense mission area is the integrated efforts of a Joint Integrated Air Defense System (JIADS) to counter a CM threat. The JT&E will address all five elements of the JIADS CM kill chain: Detect, Track, Identify, Allocate Assets, and Engage.

BACKGROUND INFORMATION

With the aid of a Joint Working Group, the JCMD staff formulated the following problem statement on JCMD for the JT&E: "*The Joint Integrated Air Defense "Family of Systems" capability to meet the cruise missile threat has not been fully explored*."

The term "Family of Systems" refers to the collection of individual systems that make up the JIADS. The family includes command, control, and communications assets (E-3 aircraft, E-2 aircraft, ground systems, etc.), shooter assets (fighter aircraft, Patriot, Aegis, etc.), and all the other principal systems resident in a theater that can perform one or more JIADS functions. The JCMD JT&E will test current (2002) JIADS JCMD capability, identify problem areas, and then test implemented improvements and enhanced JIADS JCMD capability (2003). The selected methodology for the JT&E includes a mix of joint field tests with operational units involved in the joint air defense mission and of multipurpose, interactive simulations. This test approach provides the ability to assess the effectiveness of a joint force's ability to counter the CM threat, identify critical problem areas, define potential enhancements, and assess the effects of the enhancements on the mission effectiveness of a joint integrated air defense force. The JTF will develop and leave behind a series of legacy products designed to institutionalize the work and results of the JT&E.

The first JCMD JT&E field activity, the MT, occurred in Feb-Mar 2000 in conjunction with the All Service Combat Identification Evaluation Team (hereafter called by a new title of Joint Combat Identification Evaluation Team (JCIET)) evaluation. Air defense is a major objective of the JCIET evaluation and featured participation by a JCMD-supplied CM surrogate as part of the threat forces. The JTF met all MT objectives and demonstrated the capability to integrate with the JCIET evaluations, coordinate CM surrogate operations, and collect data. Subsequent field tests will also use the JCIET evaluations as the venue of choice.

TEST & EVALUATION ACTIVITY

The JTF analyzed the MT data and produced the MT final report in December 00. Exercise Amalgam Virgo took place June 1-2, 2001. The goal of the exercise was to increase the capability to detect, track, and intercept CM and unmanned aerial vehicle (UAV) threats, using forces under NORAD Control. All simulated CM and UAV launches occurred June 2, 2001. Overall, eight MQM-107 drone CM surrogates were launched during the exercise and four BD-5 (UAV surrogate) sorties were flown. Simulated engagements occurred against all drone and BD-5 sorties. JCMD participation included continuing data collection and risk-reduction efforts for the FT-1/JCIET activity as well as the observation of JIADS system performance.

TEST & EVALUATION ASSESSMENT

The JCMD JT&E program meets the stated purposes of the OSD JT&E Program and the Services and CINCs continue to support the project. Resources and planning are on track to support continued field testing.